



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,436	12/28/2001	Ehrich J. Braunschweig	57283US002	9278

32692 7590 10/08/2003

3M INNOVATIVE PROPERTIES COMPANY  
PO BOX 33427  
ST. PAUL, MN 55133-3427

EXAMINER

MCDONALD, SHANTESE L

ART UNIT PAPER NUMBER

3723

DATE MAILED: 10/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/033,436

Applicant(s)

Braunschweig et al.

Examiner

McDonald, Shantese

Art Unit

3723



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Sep 16, 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above, claim(s) 17-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2-5 6) ☐ Other:

Art Unit: 3723

### DETAILED ACTION

1. Applicant's election without traverse of claims 1-16 in Paper No. 8 is acknowledged.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3,5-10 and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stout et al. in view of Law et al.

Stout et al. teaches a backing, 11 for an abrasive article comprising a sheet like polymeric substrate, (col. 12, lines 11-12), having a first major surface including a uniform or random pattern of non-abrasive raised and depressed areas, (col. 6, lines 1-10), an abrasive article having an abrasive coating which has a shaped abrasive surface comprising raised and depressed areas, (fig. 2), comprising silicon carbide abrasive particles and a binder make coating selected from acylate resins, and a size coating selected from a group consisting of phenolic resins, over the make coat, (col. 18, line 46- col. 20-line 44). Stout et al. teaches all the limitations of the claims except for the backing having a filament stems having flattened distal ends integrally shaped in the second major surface. Law et al. teaches a backing with filament stems having flattened distal ends, (fig.9). It would have been obvious to one having ordinary skill in the art at the time the

Art Unit: 3723

invention was made, to provide the abrasive article of Stout et al. with a backing having filament stems, as taught by Law et al., in order to enhance the backings attachment capabilities

4. Claims 4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stout et al. in view of DeVoe et al..

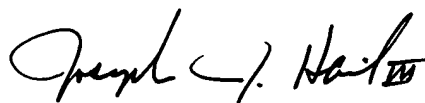
Stout et al. teaches all the limitations of the claims except for hook elements integrally shaped into the second major surface of the backing pad. DeVoe et al. teaches hook elements, 203, integrally shaped into the second major surface of the backing pad. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the abrasive article of Stout et al. with a hook elements integrally shaped into the second major surface of the backing pad, as taught by DeVoe, in order to enhance the backings attachment capabilities.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ravipati et al. was cited to show another example of an abrasive article..

Art Unit: 3723

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shantese McDonald whose telephone number is (703) 308-8722.

A handwritten signature in black ink, appearing to read "Joseph J. Hail, III". The signature is fluid and cursive, with a large initial "J" and a stylized "H".

Joseph J. Hail, III  
Supervisory Patent Examiner  
Technology Center 3700

S.L.M.

October 1, 2003